UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,407	03/08/2001	Michael E. Baskey	POU920000200US1	2905

7590   11/02/2005

Floyd A. Gonzalez - Attorney
IBM Corporation - MS P386
2455 South Road
Poughkeepsie, NY   12601

EXAMINER
TANG, KENNETH

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	09/801,407	BASKEY ET AL.
	Examiner	**Art Unit**	
	Kenneth Tang	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *59-61,63-80,82-99 and 101-121* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *59-61,63-80,82-99 and 101-121* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/24/05*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the Amendment filed on 8/16/05. Applicant's arguments

have been fully considered but are moot in view of the new grounds of rejections.

2. Claims 59-61, 63-80, 82-99, and 101-121.

Claim Objections

3. Claims 117, 119, and 121 are objected to because of the following informalities: The

term "programmably" is grammatically an incorrect word. The Examiner recommends to simply

delete this term from the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 71 recites the limitation "the workload" in line 2. There is insufficient antecedent

basis for this limitation in the claim. Claims 90 and 109 are rejected for the same reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   **Claims 59-61, 64-75, 77-80, 83-94, 96-99, 102-113, and 115 are rejected under 35**

U.S.C. 103(a) as being unpatentable over Gulick et al. (hereinafter Gulick) (US 6,314,501

B1) in view of Makhlouf (US 6,789,054 B1).

6.   As to claim 59, Gulick teaches a system for the collection and analysis of computer

system capacity data in a partitioned computer system having a computer system first partition

and a computer system second partition *(col. 33, line 55-59)*, the system comprising:

        a network *(col. 33, line 55-59)*;

        a partitioned computer system in communication with the network wherein the

partitioned computer system includes instructions to execute a method comprising the steps of

(col. 33, line 55-59):

        a)   an analysis application running in a computer system second partition obtaining

information of a computer system first partition *(obtaining the information by shared window,*

col. 2, lines 62-64, col. 3, lines 6-35, col. 4, lines 40-42);

        b)   the analysis application obtaining resource utilization information of the computer

system first partition *(obtaining the information by shared window, col. 2, lines 62-64, col. 3,*

lines 6-35, col. 4, lines 40-42 and resource balancing directives based on said first partition

information, col. 3, lines 25-35, col. 52, lines 3-45);

7.   Gulick fails to explicitly teach the information including throughput information,

calculating a resource control parameter using the resource utilization information obtained and

the throughput information obtained, indicating real-time performance. However, Makhlouf

teaches a visual/graphical analysis application running in a networked and partitioned computer

with resource monitoring control parameters based on system performance metrics such as

throughput, resource utilization, etc for real-time systems *(col. 17, line 17, col. 1, lines 36-46,*

col. 46, lines 43-59, col. 36, line 67, see claim 1). It would have been obvious to one of ordinary

skill in the art at the time the invention was made to combine Gulick and Makhlouf for at least

the reason of being able to easily analyze the computer system in a graphical/visual way to the

user *(col. 1, lines 38-46, col. 2, lines 5-23 and 65-67, etc.)*.

8.   As to claim 60, Makhlouf teaches wherein the resource utilization information comprises

CPU utilization (processor utilization) *(col. 38, lines 42-44)*.

9.   As to claim 61, Makhlouf teaches the user agent displaying at a terminal, the resource

control parameter wherein the resource control parameter comprises the throughput information

as a function of resource utilization *(col. 17, line 17, col. 1, lines 36-46, col. 46, lines 43-59, col.*

36, line 67, col. 36, line 67).

10.   As to claim 64, Makhlouf teaches the user agent displaying as a graph at a terminal the

resource control parameter, the display comprising effective utilization versus resource

utilization wherein effective utilization derived in the calculating step comprises change in

throughput divided by change in resource utilization *(col. 17, line 17, col. 1, lines 36-46, col. 46,*

lines 43-59, col. 36, line 67, and Abstract).

11.   As to claim 65, Gulick and Makhlouf fails to explicitly teach the user agent displaying at

a terminal a mark, the mark indicating the utilization at which the effective utilization is half of

its maximum. However, it would be obvious to one of ordinary skill in the art at the time the

invention was made to include the feature that the display of effective utilization is marked at the

utilization at which the resource control parameter is half of its maximum because it is the

medium point of its utilization.

12.   As to claim 66, Makhlouf teaches the user agent using the resource control parameter to

adjust resources allocated to a workload of the first partition *(col. 32, lines 63-66)*.

13.   As to claim 67, Makhlouf teaches wherein the using step is performed by a workload

manager *(col. 46, line 59)*. Gulick also teaches a workload manager *(Unisys MCP, col. 12, lines

30-54, col. 33, lines 7-29)*.

14.   As to claim 68, Makhlouf teaches wherein the workload manager is in a third partition

(col. 46, line 59). Gulick also teaches a workload manager in a different partition *(Unisys MCP,

col. 12, lines 30-54, col. 33, lines 7-29)*.

15.   As to claim 69, Gulick teaches providing the throughput information and the resource

utilization information for the calculating step by way of a shared portion of memory, the shared

portion of memory programmably accessible to both partitions, the shared memory for

transferring information between the computer system first partition and the computer system

second partition *(see Abstract, e.g.)*.

16.   As to claim 70, Gulick and Makhlouf fails to explicitly teach providing the throughput

information and the resource utilization information for the calculating step using a single

operation memory to memory transfer function. However, it is well known in the art and

obvious to combine/group two (for example) operations into one in order to simply and increase

speed.

17.   As to claim 71, Makhlouf teaches wherein the workload is managed by modifying

resources allocated to the first partition *(col. 32, lines 63-66)*.

18.   As to claim 72, Gulick teaches wherein the resources include I/0 (col. 2, lines 21-23).

19.   As to claim 73, Gulick teaches wherein the resources include memory (col. 2, lines 21-

23).

20.   As to claim 74, Gulick teaches wherein the resources include processors (col. 2, lines 21-

23).

21.   As to claim 75, Makhlouf teaches wherein the workload is managed dynamically *(col. 31,*

line 1, Abstract).

22.   As to claim 77, Gulick and Makhlouf fails to explicitly teach wherein the throughput

information comprises an inverse throughput. However, it is well known in the art that the

inverse throughput can be used as its inverse form. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to include the feature of using the

inverse throughput in its inverse form to the existing system in order to make the value

compatible (units wise, for example) for resource allocation calculations.

23.   As to claim 78, it is rejected for the same reasons as stated in the rejection of claim 59.

24.   As to claims 79-80, they are rejected for the same reasons as stated in the rejections of

claims 60-61.

25.   As to claims 83-94, they are rejected for the same reasons as stated in the rejections of

claims 64-75.

26.   As to claim 96-97, they are rejected for the same reasons as stated in the rejection of

claim 59 and 77.

27.   As to claims 98-99, they are rejected for the same reasons as stated in the rejections of

claims 60-61.

28. As to claim 102-113, they are rejected for the same reasons as stated in the rejections of claims 64-75.

29. As to claim 115, it is rejected for the same reasons as stated in the rejection of claim 77.

30. **Claims 63, 82, and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gulick et al. (hereinafter Gulick) (US 6,314,501 B1) in view of Makhlouf (US 6,789,054 B1), and further in view of Chang et al. (hereinafter Chang) (US 20020016952 A1).**

31. As to claim 63, Gulick and Makhlou fails to explicitly teach the user agent displaying at a terminal, the resource control parameter comprising <u>curve fitted</u> throughput information as a function of resource utilization, wherein the shifted throughput information is derived from the throughput information obtained. However, Chang teaches throughput with resource utilization and curve fitting to achieve estimation and prediction *([0295] and [0541])*. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Chang with Gulick and Maklouf because this would allow for estimation on performance *([0295])*.

32. As to claims 82 and 101, they are rejected for the same reasons as stated in the rejection of claim 63.

33.   Claims 76, 95, 114, and 116-121 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Gulick et al. (hereinafter Gulick) (US 6,314,501 B1) in view of Makhlouf

(US 6,789,054 B1), and further in view of Kutcher et al. (hereinafter Kutcher) (US

6,301,615).

34.   As to claim 76, Gulick and Makhlouf fails to explicitly teach teaches wherein the

throughput information comprises network packet counts *(col. 44, lines 28-39, col. 53, lines 30-*

50, col. 3, lines 33-35). However, Kutcher discloses throughput information is obtained by

relating network traffic to a processor utilization over a period of time and that the network

traffic is obtained by counting network packets related to a partition (NETSTA and VMSTATE,

col. 5-6). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine Kutcher with Gulick and Makhlouf because this would allow for

examination of the performance of the system throughput.

35.   As to claims 95 and 114, they are rejected for the same reasons as stated in the rejection

of claim 76.

36.   As to claim 116, Gulick and Makhlouf teaches wherein the throughput information

obtained comprises a network packet activity, wherein further the resource utilization obtained

comprises CPU utilization during the interval of time, wherein the resource control parameter

calculated comprises a representation of a relationship between the throughput information

obtained and the resource utilization obtained *(see rejection of claim 59)*. Gulick and Makhlouf

fails to explicitly teach teaches wherein the throughput information comprises network packet

counts *(col. 44, lines 28-39, col. 53, lines 30-50, col. 3, lines 33-35)*. However, Kutcher

discloses throughput information is obtained by relating network traffic to a processor utilization

over a period of time and that the network traffic is obtained by counting network packets related

to a partition (NETSTA and VMSTATE, col. 5-6). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine Kutcher with Gulick and

Makhlouf because this would allow for examination of the performance of the system

throughput.

37.   As to claim 117, Gulick teaches comprising the further step of providing any one of the

throughput information or the resource utilization information for the calculating step by way of

a shared portion of memory, the shared portion of memory programmably accessible to both

partitions, the shared memory for transferring information between the computer system first

partition and the computer system second partition (shared memory window) *(see Abstract)*.

38.   As to claims 118-121, they are rejected for the same reasons as stated in the rejection of

claims 116 and 117.

Response to Arguments

39.   Applicant's arguments have been fully considered and were found to be persuasive. New

grounds of rejections were made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
10/31/05

MENG-AI T. AN
SUPERVISORY PATENT EXAMINER